

Ontario—By the Numbers: A Statistical Examination of Enrolment in Ontario Secondary School Music Classes

Nora Vince

The University of Western Ontario

Abstract

This chapter reports on the results of a statistical analysis of secondary school Music enrolment in Ontario from 1993-2002. Data from the electronic database at the Ontario Ministry of Education were examined to determine if Music enrolment was changing, both in absolute terms, and in relationship to the overall secondary school enrolment. Results varied, with enrolment increasing at the Grade 9 level, and decreasing in the remaining grades. Change was most noticeable following the introduction of the revised secondary curriculum in 1999. Data were also examined from the Ontario Universities' Application Center and results indicate that the vast majority of students registered in a final senior secondary school Music course use the credit for university application, but not for access to university Music education.

The historical account presented by Willingham and Cutler outlines numerous past problems in education in Ontario and alludes to difficulties in Music education associated with academic and financial decisions of the Mike Harris Conservative government elected in 1995. They also raise interesting questions regarding the future of

Vince, N. (2007). Ontario—by the numbers: A statistical examination of enrolment in Ontario secondary school music classes. In K. Veblen & C. Beynon (Eds. with S. Horsley, U. DeAlwiss, & A. Heywood), *From sea to sea: Perspectives on music education in Canada*. Retrieved from <http://ir.lib.uwo.ca/musiceducationE-books/1/>

Music Education in Ontario, particularly with respect to curriculum content and the question of the number of students who elect to investigate the Arts through Music.

Recent educational reforms in areas such as Alabama and Virginia, and financial restraint in areas such as California, have encouraged researchers to examine Music enrolment to determine the aggregate number of students enrolled in Music classes (See for example, Johnson, 1990, S. King, 1991, and Music for All Foundation, 2004). A similar study was performed with Music enrolment in Ontario by using data received from the Ministry of Education electronic database, and the results are somewhat surprising.

Secondary school Music enrolment data for the academic years from 1993-2002 were examined and compared with overall secondary school enrolment during that time. (Data from the Ministry requires a minimum of two years to assemble and 2002 data were the most recent available at the time of writing in the summer of 2005.) This chapter presents the results of that statistical analysis and suggests further questions for discussion on future Music education classes in Ontario. (See Vince, 2005, for complete study Methodology and for a qualitative examination regarding implementation of the new curriculum.)

Results

The statistical results show a complex relationship, with a definite decline in the percentage of students enrolled at the senior level after the implementation of the new curriculum, combined with an increase in both the actual numbers and percentage of students overall registered in Music in Grade 9. There was a problem with the Grade 9

Vince, N. (2007). Ontario—by the numbers: A statistical examination of enrolment in Ontario secondary school music classes. In K. Veblen & C. Beynon (Eds. with S. Horsley, U. DeAlwiss, & A. Heywood), *From sea to sea: Perspectives on music education in Canada*. Retrieved from <http://ir.lib.uwo.ca/musiceducationE-books/1/>

data for the first 5 years of the study; these were the years under the *Common Curriculum* where individual student credits were not granted and most school boards recorded only global Grade 9 enrolment instead of enrolment by specific course. However, during the final five years, individual credits returned and the Grade 9 Music data records generally increasing enrolment (See Figure 1).

Examining Music enrolment by year, rather than by grade, shows an increase in total Music enrolment during the first eight years of the study and a decrease in the latter two. Again, eliminating the faulty Grade 9 data from the picture, one can see the overall increase followed by a sharp decline in 2001, where enrolment is at its second lowest level in the 10 years, over 150 fewer students than in 1994 (See Figure 2).

Figures 1 and 2 show an increase in enrolment numbers in Grade 10 after 2000 and a steady rate of participation numbers in Grades 11 and 12 between 2001 and 2002, but a closer look at the numbers, and the sources for the increase, reveals a different picture. Overall enrolment in secondary schools in Ontario has increased, giving an inaccurate portrayal of Music registration. Examining Music enrolment as a percentage of overall enrolment clarifies retention rates.

The release of overall secondary school enrolment data lags behind specific course enrolment by one year making percentages available for only 1993-2001. In the Grade 9 analysis, the previously identified problem with Music enrolment data for the years of the *Common Curriculum* adds complications for accurate percentage calculations. Hence, the percentage data contain only four years for Grade 9. As with the

raw numbers, the percentages also indicate a general trend of increased Music enrolment (Figure 3).

The picture changes when one examines the percentages of all secondary school students taking Music in Grades 10 and 11 (See Figure 4). The percentages of overall students involved in Music are higher than one might have gathered from anecdotal evidence, but they are declining. It is curious to observe that changes between grades prior to 1999 were concurrent, not sequential. One might assume that a lower percentage of students in Grade 10 in year X would transfer into a similarly lower percentage of students in Grade 11 in year X + 1, but that was not the case until after the implementation of the revised curriculum in 1999. Students over the age of 21 were removed from Grade classifications and put under a separate heading in 1996. However, the removal of these *Mature* students from the overall data following 1995 is not discernable in the percentage calculation. In fact, the percentage of students taking Music increased in both grades between these two years.

Music enrolment percentage comparisons are risky for Grades 12 and those registered in the Ontario Academic Credit (OAC, the nomenclature used to replace Grade 13 for the final, university-required secondary school credit in Ontario prior to the reformed curriculum). Ontario government data categorizes overall senior enrolment as *Grade 12 – No OACs*, *Grade 12 – less than 6 OACs* and *Grade 12 – more than 6 OACs*, but Music enrolment data as *Grade 12* and *OAC*. For the purposes of this evaluation, the group with fewer than six OAC credits was divided and shared with the other two to enable comparisons with both Grade 12 Music and OAC Music (Figure 5). It is probable

Vince, N. (2007). Ontario—by the numbers: A statistical examination of enrolment in Ontario secondary school music classes. In K. Veblen & C. Beynon (Eds. with S. Horsley, U. DeAlwiss, & A. Heywood), *From sea to sea: Perspectives on music education in Canada*. Retrieved from <http://ir.lib.uwo.ca/musiceducationE-books/1/>

that the spike in 2000 can be explained by the presence of students under the previous curriculum (OS:IS) wishing to conclude their secondary schooling prior to the *double cohort* year by completing all their courses in fewer than five years and “doubling up” in Music to do so.

Another way of examining the annual data is to follow cohorts of students through their secondary education. This form of examination underscores the changes following the implementation of the new curriculum in 1999. It is unfortunate that the lack of accurate data for Grade 9 for 1993-1997 permits only one year of complete comparison prior to the reforms; however, examining Grades 10-OAC for all 9 years tells its own story, and the missing Grade 9 data can be reasonably estimated from the data for Grade 10 in subsequent years. Examining the final year under the old system (1998), and comparing it to the first 3 cohorts of the revised system (all that were available, since overall enrolment for 2002 was not available at time of writing), the difference at the enrolment level at Grade 10 looks small, less than a 2 percent decline between the 1998 and 1999 cohorts (from 20 to 18 percent). However the percentage of overall students in Grade 9 registering in Music had increased by substantially (from 22 percent in 1998 to nearly 27 percent by 2000), making the degree of change in enrolment between the two grades more dramatic for the cohorts under the revised curriculum (Figure 6).

Using descriptive statistics, one could examine the percentages of overall students taking Grade 10 Music in 2000 and 2001 and state that although they were lower than the norm they were within statistical expectations (within 2 Standard Deviations of the Mean). However, dividing the data into pre-and post-reform shows that they are

Vince, N. (2007). Ontario—by the numbers: A statistical examination of enrolment in Ontario secondary school music classes. In K. Veblen & C. Beynon (Eds. with S. Horsley, U. DeAlwiss, & A. Heywood), *From sea to sea: Perspectives on music education in Canada*. Retrieved from <http://ir.lib.uwo.ca/musiceducationE-books/1/>

substantially lower than the average of the pre-reform years and are lower than any of the other years under investigation (See Table 1).

Table 1

Percent of All Grade 10 Students Taking Music – Descriptive Statistics

	Mean	Deviation
1993-2001		
(9 years)	0.19	.11
Pre reform		
(7 years)	0.62	.86
Post reform		
(2 years)	8.73	.07

Similar, though not quite as dramatic results were found in Grade 11 data. Data from Grade 12 could not be examined for the post-reform section. Even if overall data had been available, many school boards did not offer the OAC credit for the final year under the old program, and therefore enrolment in the new Grade 12, which was considered an equivalent credit, was artificially increased (Vince, 2005).

Credit Use

There were two distinct questions arising from the examination of use of credits: the increase in the use of the AMR (Repertoire credit) and use of the “Open (O)” and “University (U)” nomenclature designation in Grades 11 and 12.

Willingham and Cutler (2007) discuss the use of the Repertoire Credit (giving a credit for ensemble work) as one way in which some districts maintained their programs. Examination of province-wide usage of this credit showed an increase of 300% over the 10-year span (Figure 7).

Although the Repertoire Credit and course was originally introduced at the Senior level and limited to a two-credit maximum for high school graduation (Government of Ontario, 1990), data show enrolment in all grades, and a definite increase in the Intermediate classes (Figure 8). Interviews with teachers, performed as part of the qualitative research for the original thesis, revealed a disparity among schools and school boards: some allowed the course to be offered, some required co-requisites in regularly classes, some offered it as half credits, some as whole credits, some offered it during class time, some scheduled class before or after regular school time, and some refused to use it at all (Vince, 2005). Considering many who offered the credit did so as co-requisites, the total number of students registered in Music classes as reported in the data actually counts some students more than once, such that the recent decline in Grade 10, 11, and 12 Music enrolment has been tempered by the double counting of students registered in the AMR.

Vince, N. (2007). Ontario—by the numbers: A statistical examination of enrolment in Ontario secondary school music classes. In K. Veblen & C. Beynon (Eds. with S. Horsley, U. DeAlwiss, & A. Heywood), *From sea to sea: Perspectives on music education in Canada*. Retrieved from <http://ir.lib.uwo.ca/musiceducationE-books/1/>

The problems with Repertoire credit go beyond the disparity in offerings among school boards. The credit is often obtained simply by attending rehearsals and performances. It is not an accurate rendering of the curriculum content assumed at the associated grade level. Granting a credit identified with course nomenclature containing the code element “M,” which may be used for university admission, when the principal requirement is attendance at rehearsals, could lead to insupportably high academic averages that would affect university entrance acceptances and scholarships. If universities cannot count on one Music credit to represent academic success, they may begin to doubt them all. Students are already identifying university programs that will not accept “M” credits for admission, an interesting conundrum causing some districts to offer a 4U version of Music that technically does not exist according to the Ministry documents (Government of Ontario Ministry of Education, 2000).

This “U” designation is not the only misuse of nomenclature in Music codes. There are some courses at the senior level that are labelled “O” for “Open.” However, these courses should only be found at Grade 11 (3 Open), not at Grade 12 (4 Open) and the content for these courses should be related to the content specified in the curriculum guides, which involves putting on a production and an advanced level of performance and theory. Instead, many of the 3 *Open* designations have been applied to beginning courses offered at the senior level, such as guitar or keyboard, and a 4 *Open* designation given to courses following in the next year. None of the teachers interviewed for the study indicated using a 3 *Open* designation for a course that would actually have matched the curriculum document (Vince, 2005).

Vince, N. (2007). Ontario—by the numbers: A statistical examination of enrolment in Ontario secondary school music classes. In K. Veblen & C. Beynon (Eds. with S. Horsley, U. DeAlwiss, & A. Heywood), *From sea to sea: Perspectives on music education in Canada*. Retrieved from <http://ir.lib.uwo.ca/musiceducationE-books/1/>

Discussion and Conclusion

Who are the intended students for secondary school music courses and what does that mean for the content and philosophy of Music classes? Since over 25 percent of all students are taking a Music credit in Grade 9, what do we, as music educators, want them to learn? Should Grade 12 secondary school Music be required for admission to a tertiary education in Music?

An investigation into data received from the Ontario Universities' Application Centre determined that, although 85 percent of students registered in the Ontario Academic Credit Music credit went on to study at the university level, an average of only 775 per year (for 1994-2002) were applying to a university Music degree program (Vince, 2005). When the revised curriculum is examined in 2006, it is imperative that the examiners, hopefully Ontario Music Educators, realize the academic characteristics of the students who are choosing to stay in Music, and are able to determine the knowledge most suitable for that audience. Although as an academic subject worthy of inclusion in university application processes there must be a semblance of rigor, teachers and students alike stress the need for Music to be a performing medium, and some of the content now required at the 4M level does not leave time for performance-based programs.

Similarly, one must question the use of the Repertoire Credit as a viable entry on a University application form. Although the "Open" designation is not supposed to apply to Grade 12, perhaps this is one place where it would be valid. This would allow students

to gain a credit for ensemble participation, but not to use it for application to tertiary education.

The questions for the future do not change with the knowledge of the number of students involved in Music education in Ontario. Yet precise data may alter the answers to these questions. If 25 percent of the Grade 9 class takes Music (over 40,000 students), and 25 percent of that group drop out of the Music program after one year, then what is it that we, as Music educators, want these students to learn in the brief time that we have with them? How can we best fill their Music education needs? In the past, that original class of approximately 40,000 students shrunk to approximately 5,500 by the senior year, and of those remaining students, few went on to apply to major in Music at the university level. Curriculum content designed solely for this small group of “stakeholders,” (Gidney, 1999; O’Farrell, 2001) the buzzword used in government press releases regarding curriculum reform in the nineties, seems to be miss-directed at best, particularly since university Music programs do not require completion of this credit for acceptance to their programs.

By the numbers, Ontario has a good news/bad news scenario. During the past 10 years, enrolment in Music classes at the Grade 9 level has increased. Unfortunately, as discovered by S. King (1991) in Virginia and by A. King (2000, 2004) in Ontario, many of these students are taking their one mandatory Arts credit and then do not have time in their schedules to take further classes. Many students in their senior years are not choosing to enrich their education with Music. If we cannot change the retention rate, then we must make the best possible use of the brief time we have.

Vince, N. (2007). Ontario—by the numbers: A statistical examination of enrolment in Ontario secondary school music classes. In K. Veblen & C. Beynon (Eds. with S. Horsley, U. DeAlwiss, & A. Heywood), *From sea to sea: Perspectives on music education in Canada*. Retrieved from <http://ir.lib.uwo.ca/musiceducationE-books/1/>

Lee Bartel (2004) suggests it is time for *Questioning The Music Education Paradigm*. If we only have a student for one year, re-examining “What We Teach and For What We Teach” and “Whom We Should Be Teaching” (p. iv) is necessary in order to make optimum use of all of our resources. What is the answer for the student whose sole education from a qualified music specialist is 110 hours in Grade 9?

The numbers are cold and hard, but they represent children and their time in education in Music classes in Ontario. Further research needs to be done to determine if we are using the time we have with these students wisely.

Figures

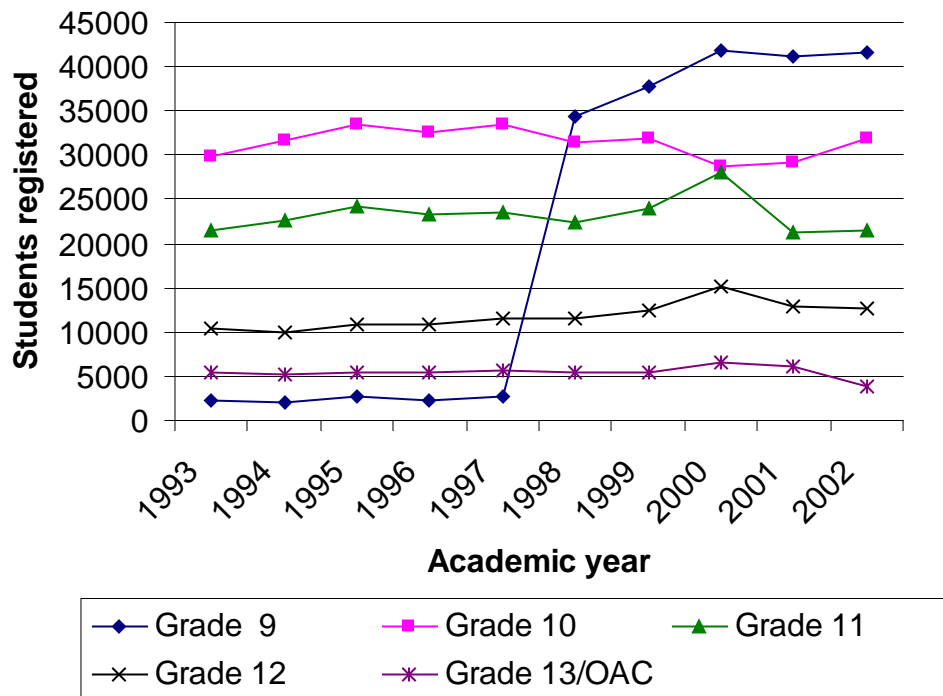


Figure 1. *Ontario secondary school Music enrolment 1993-2002*. The figure illustrates the annual enrolment in music classes by grade. The obvious difference in the Grade 9 figures between 1993-1997 and 1998-2002 are the result of the Common Curriculum reporting procedures, and do not suggest an extreme change in enrolment (all figures and tables taken from Vince, 2005).

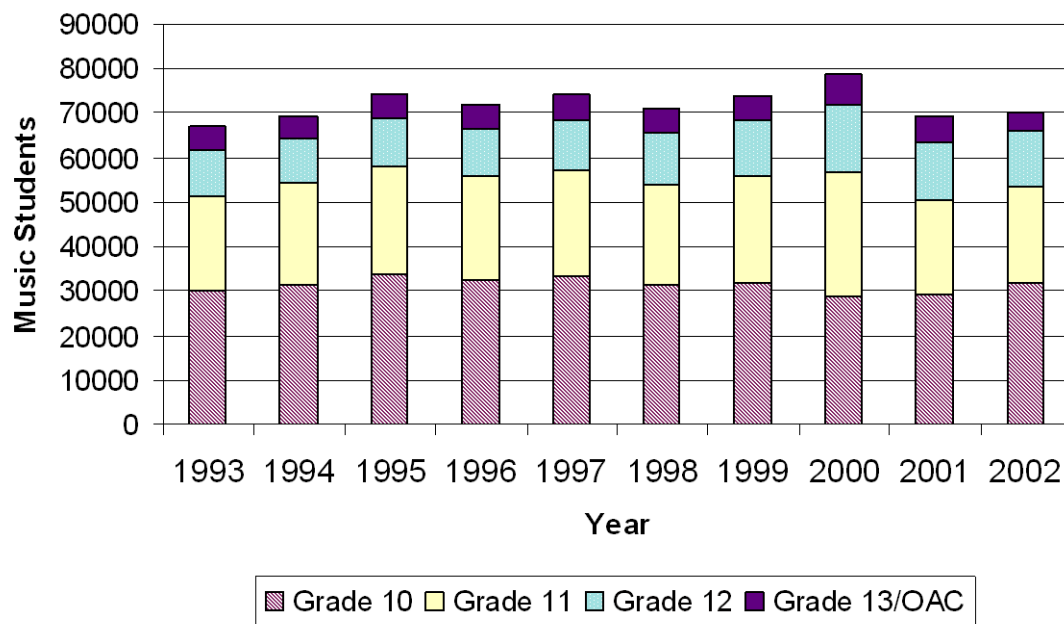


Figure 2. *Annual Music enrolment Grades 10–13/OAC*. The dramatic decrease in enrolment in Grade 10 in 2000 was more than compensated by the increase in enrolment in Grades 11, 12 and 13/OAC to make 2000 the year with the highest overall Music enrolment over the 10 years.

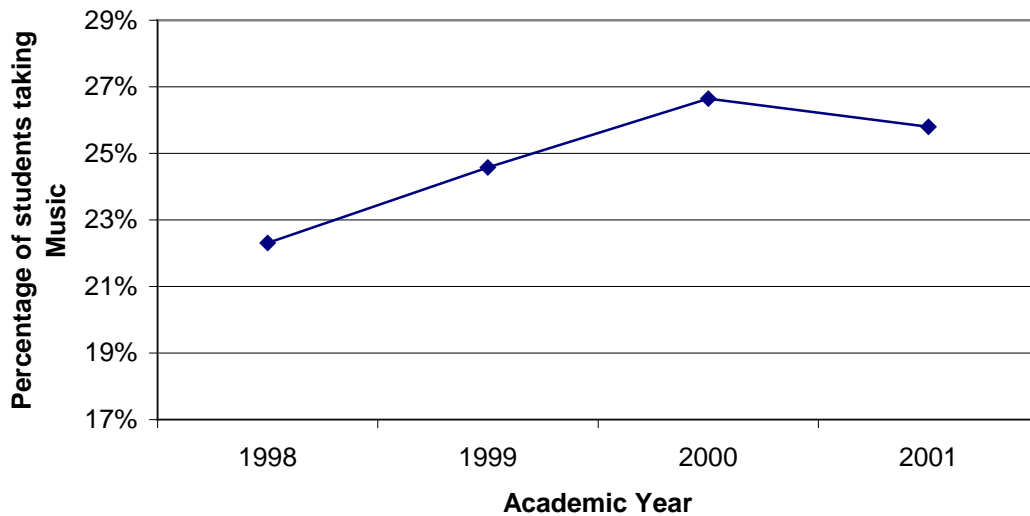


Figure 3. *Percentage of overall Grade 9 student body taking Grade 9 Music for one year prior to, and the first 3 years of, the restructured program.* Although not large enough to determine a trend, this graph does show an increase in the number of students taking music in Grade 9, and underscores the subsequent decreases in Grades 10 and 11.

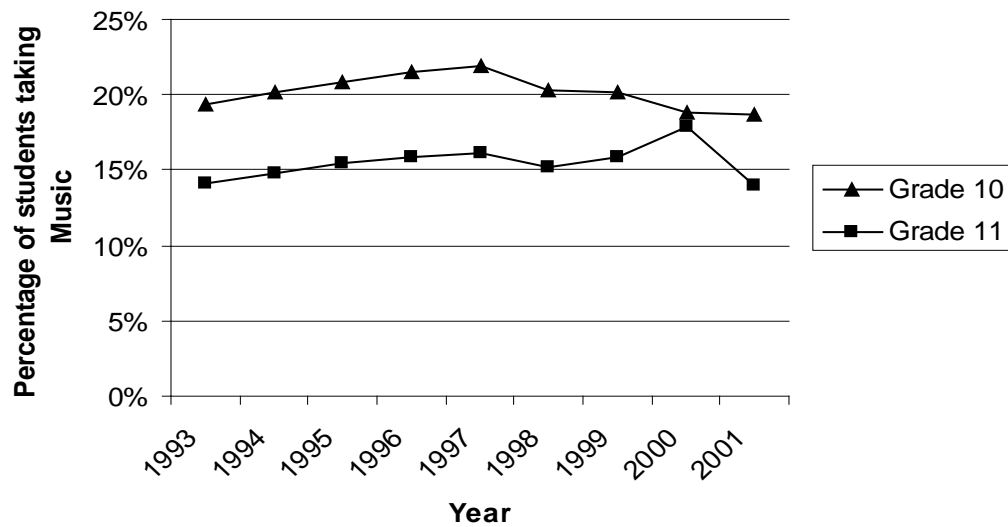


Figure 4. *Percentage of overall Grade 10 and 11 student body taking Grade 10 and Grade 11 Music for the years 1993-2001. (Note: 2002 overall data not available).*

Vince, N. (2007). Ontario—by the numbers: A statistical examination of enrolment in Ontario secondary school music classes. In K. Veblen & C. Beynon (Eds. with S. Horsley, U. DeAlwiss, & A. Heywood), *From sea to sea: Perspectives on music education in Canada*. Retrieved from <http://ir.lib.uwo.ca/musiceducationE-books/1/>

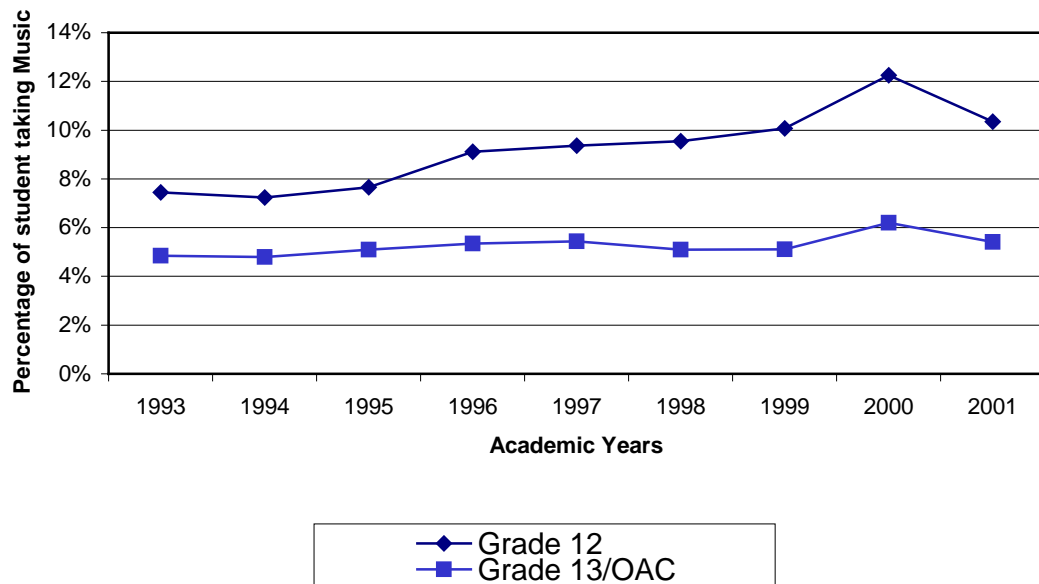


Figure 5. *Music enrolment for senior Music credits.*

Vince, N. (2007). Ontario—by the numbers: A statistical examination of enrolment in Ontario secondary school music classes. In K. Veblen & C. Beynon (Eds. with S. Horsley, U. DeAlwiss, & A. Heywood), *From sea to sea: Perspectives on music education in Canada*. Retrieved from <http://ir.lib.uwo.ca/musiceducationE-books/1/>

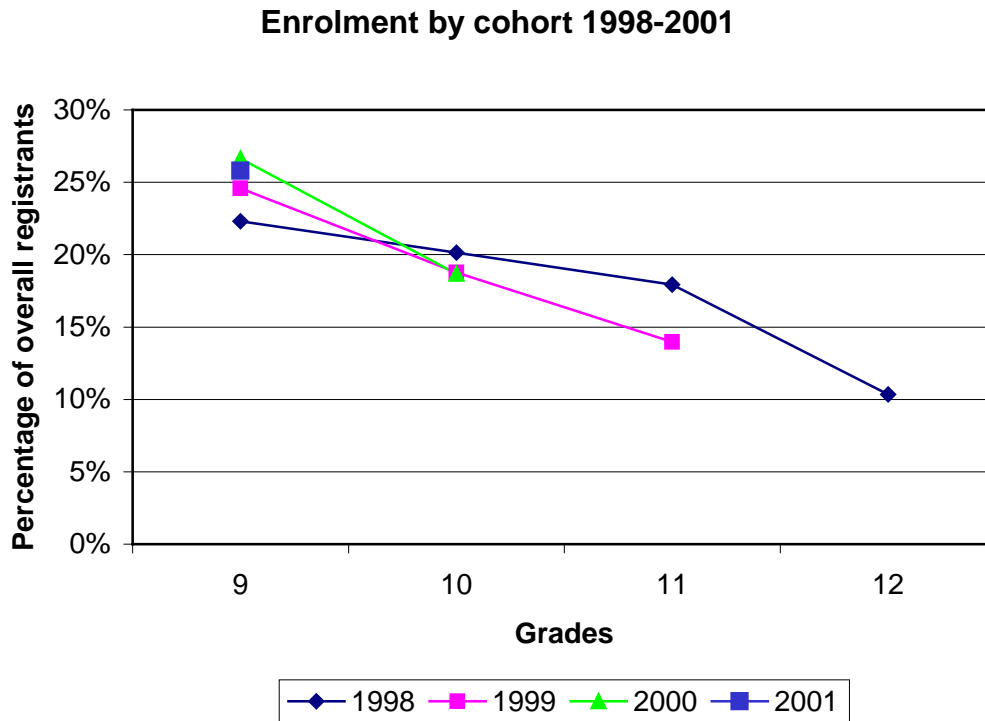


Figure 6. *Music enrolment by entrance cohort.*

Each line represents the group of students entering high school in the identified year and taking music classes for the grades specified. 1998 was the last year of the old system, 1999 the first year of the restructured program.

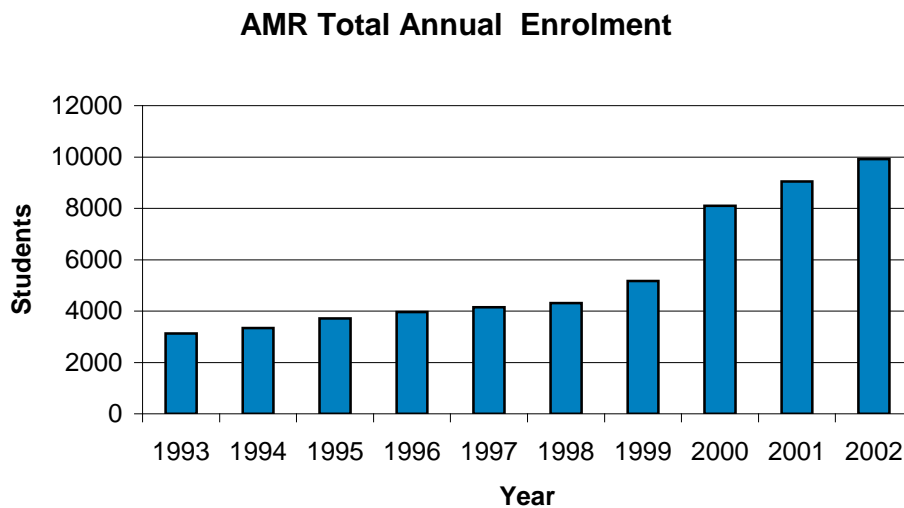


Figure 7. *Repertoire credit annual enrolment*. The graph shows steady increase in total enrolment over the first seven years of the study, and a substantial increase beginning in 2000.

Vince, N. (2007). Ontario—by the numbers: A statistical examination of enrolment in Ontario secondary school music classes. In K. Veblen & C. Beynon (Eds. with S. Horsley, U. DeAlwiss, & A. Heywood), *From sea to sea: Perspectives on music education in Canada*. Retrieved from <http://ir.lib.uwo.ca/musiceducationE-books/1/>

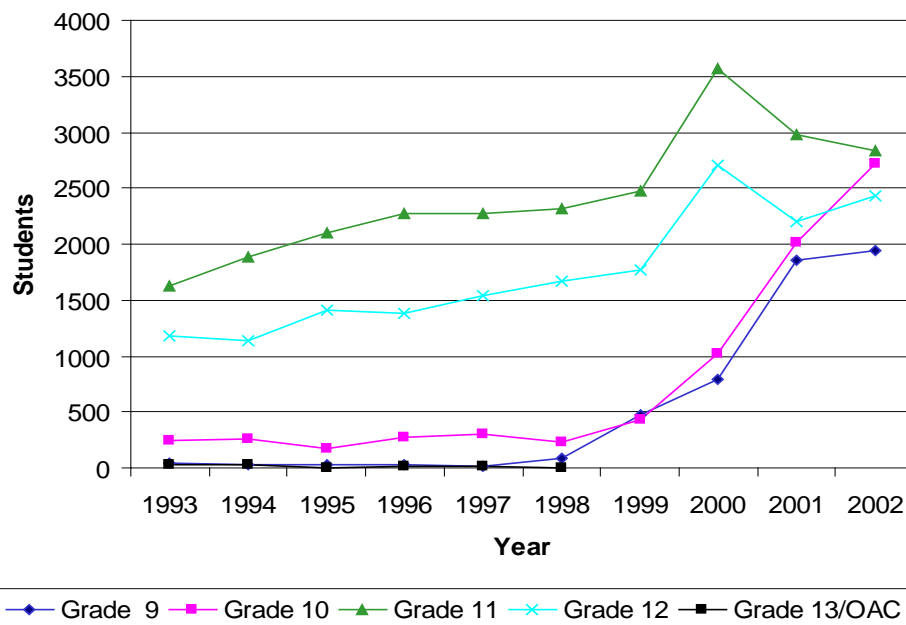


Figure 8. *Repertoire credit enrolment by grade.*

The increase in enrolment at the Intermediate levels after 1999 is offset by the decrease at the Senior levels. There were no entries at the OAC level following the implementation of the new curriculum in 1999. After that time, students at the Senior level were granted the new 4M credit. The spike in 2000 was due to the labour dispute. However, it does not fully explain the overall Music enrolment increase in that year.

References

- Bartel, L. Ed. (2004). *Questioning the music education paradigm*. Waterloo, ON: Canadian Music Educators' Association.
- Gidney, R. D. (1999). *From Hope to Harris: The reshaping of Ontario's schools*. Toronto, ON: University of Toronto Press.
- Government of Ontario, Ministry of Education and Training (1990). *Curriculum: Music: Intermediate and senior divisions, 1990*. Toronto, ON: Queen's Printer.
- Government of Ontario Ministry of Education (2000). *The Ontario curriculum grades 11 and 12: The Arts*. Toronto, ON: Queen's Printer.
- Johnson, R. (1990). Band program enrollment trends in Alabama schools. *Journal of Band Research*, 26(1), 52-58.
- King, A. (2002). *Double cohort study: Phase 2 report* (Rep. No. 2). Toronto, ON: Queen's Printer.
- King, A. (2004). *Double cohort study: Phase 3 report* (Rep. No. 3). Toronto, ON: Queen's Printer.
- King, S. (1991). *The relationship of curriculum reform to participation in secondary school music classes in Virginia, 1979-1988*. Unpublished doctoral dissertation, Virginia Polytechnic Institute and State University, Blacksburg, VA.
- Music for All Foundation (2004). *The sound of silence - The unprecedented decline of music education in California public schools: A statistical review* Warren, NJ: Author.
- Vince, N. (2007). Ontario—by the numbers: A statistical examination of enrolment in Ontario secondary school music classes. In K. Veblen & C. Beynon (Eds. with S. Horsley, U. DeAlwiss, & A. Heywood), *From sea to sea: Perspectives on music education in Canada*. Retrieved from <http://ir.lib.uwo.ca/musiceducationE-books/1/>

O'Farrell, L. (2001). Writing Arts curriculum in a public sector - private sector partnership. In Available May, 2004 online at

<http://www.unesco.org/creativity/education/html>, under Canada: UNESCO.

Vince, N. (2005). *A decade of change: Music education enrolment in Ontario secondary schools from 1993-2002 and the Don Wright Faculty of Music from 1994-2003*.

Unpublished doctoral dissertation, University of Western Ontario, London, ON.

Vince, N. (2007). Ontario—by the numbers: A statistical examination of enrolment in Ontario secondary school music classes. In K. Veblen & C. Beynon (Eds. with S. Horsley, U. DeAlwiss, & A. Heywood), *From sea to sea: Perspectives on music education in Canada*. Retrieved from <http://ir.lib.uwo.ca/musiceducationE-books/1/>